

**EXHIBIT A**

What is claimed is:

- 1        1.     A method comprising:
  - 2                using active contours to detect image boundaries of a first view and a
  - 3                second view of a human face; and
  - 4                marking a first set of fiducial points on the first view and a second set of
  - 5                fiducial points on the second view.
  
- 1        2.     The method of claim 1, including:
  - 2                determining a first feature set using the first set of fiducial points, and
  - 3                determining a second feature set using the second set of fiducial points.
  
- 1        3.     The method of claim 2, further comprising:
  - 2                normalizing distances in the first feature set in terms of a distance between
  - 3                two preselected fiducial points of the first set of fiducial points.
  
- 1        4.     The method of claim 1, wherein the active contours comprise snake  
2        contours and the first and second views comprise a front view and a side view.
  
- 1        5.     The method of claim 4, wherein the snake contours for the front view  
2        comprise at least two of a face boundary, an eye boundary, a brow boundary, a nose  
3        boundary, and a lip boundary.
  
- 1        6.     The method of claim 2, wherein the first feature set and the second feature  
2        set each comprise less than ten distances.

1           7.     The method of claim 2, further comprising storing the first feature set and  
2     the second feature set in a database.

1           8.     The method of claim 7, further comprising:  
2                 partitioning said database based on a feature vector of one of the first  
3     feature set and the second feature set.

1           9.     The method of claim 8, further comprising:  
2                 in response to a query image, querying the database using reference image  
3     content corresponding to the feature vector.

1           10.    A method comprising:  
2                 obtaining feature set information from a first view of a human face and a  
3     second view of the human face; and  
4                 storing the feature set information in a database having a hierarchical tree  
5     structure.

1           11.    The method of claim 10, wherein the database includes feature set  
2     information for a plurality of individuals.

1           12.    The method of claim 10, further comprising determining whether to store  
2     the feature set information in a first branch or a second branch of the hierarchical tree  
3     structure based upon a value in the feature set information.

1           13.    The method of claim 12, wherein the value corresponds to a metric  
2     distance function.

1           14.    The method of claim 11, further comprising searching the database for at  
2   least one search result corresponding to a query image.

1           15.    The method of claim 12, further comprising searching the first branch or  
2   the second branch for a search result corresponding to a query image based on a metric  
3   distance function of the query image.

1           16.    An article comprising a machine-readable storage medium containing  
2   instructions that if executed enable a system to:  
3         obtain feature set information from a first view of a human face and a second  
4   view of the human face; and  
5         store the feature set information in a database having a hierarchical tree structure.

1           17.    The article of claim 16, further comprising instructions that if executed  
2   enable the system to determine whether to store the feature set information in a first  
3   branch or a second branch of the hierarchical tree structure based upon a value in the  
4   feature set information.

1           18.    The article of claim 16, further comprising instructions that if executed  
2   enable the system to search the database for at least one search result corresponding to a  
3   query image.

1           19.    The article of claim 17, further comprising instructions that if executed  
2   enable the system to search the first branch or the second branch for a search result  
3   corresponding to a query image based on a metric distance function of the query image.

1           20.     A system comprising:  
2               a dynamic random access memory containing instructions that if executed enable  
3       the system to use active contours to detect image boundaries of a first view and a second  
4       view of a human face, and to mark a first set of fiducial points on the first view and a  
5       second set of fiducial points on the second view; and  
6               a processor coupled to the dynamic random access memory to execute the  
7       instructions.

1           21.     The system of claim 20, further comprising instructions that if executed  
2       enable the system to determine a first feature set using the first set of fiducial points, and  
3       determine a second feature set using the second set of fiducial points.

1           22.     The system of claim 21, further comprising instructions that if executed  
2       enable the system to store the first feature set and the second feature set in a database.

1           23.     The system of claim 22, further comprising instructions that if executed  
2       enable the system to partition the database based on a feature vector of one of the first  
3       feature set and the second feature set.

1           24.     The system of claim 22, further comprising a display coupled to the  
2       processor to display a query image and at least one search result image obtained from the  
3       database in response to a similarity query based on at least one feature vector.